

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims (including any withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please ADD new claim 46 in accordance with the following:

1. (Previously presented) A data storage medium usable with a reproducing apparatus, comprising:

AV data; and

mark-up documents providing functionality enabling the reproducing apparatus to reproduce the AV data in an interactive mode;

wherein the mark-up documents comprise a start-up document comprising information about other ones of the mark-up documents corresponding to different parental levels to be displayed depending on a set parental level.

2. (Previously presented) The data storage medium of claim 1, wherein the start-up document further comprises:

meta-information indicating a parental level; and

link information indicating the other mark-up documents corresponding to the different parental levels.

3. (Previously presented) The data storage medium of claim 2, wherein the link information comprises:

link information indicating one of the other mark-up documents that is to be displayed when the set parental level is not lower than the parental level in the meta-information; and

link information indicating another one of the other mark-up documents that is to be displayed when the set parental level is lower than the parental level indicated by the meta-information.

4. (Previously presented) The data storage medium of claim 1, wherein the information about the other mark-up documents corresponding to the different parental levels comprises link information indicating respective paths of the other mark-up documents corresponding to the different parental levels.

5.-22 (Canceled)

23. (Previously presented) A method of reproducing AV data in an interactive mode, comprising:

identifying a set parental level;

selecting a mark-up document corresponding to the set parental level from a plurality of mark-up documents corresponding to different parental levels; and

reproducing the AV data in the interactive mode using the selected mark-up document corresponding to the set parental level;

wherein the identifying, the selecting, and the reproducing are performed in a reproducing apparatus.

24. (Previously presented) The method of claim 23, wherein the selecting of the mark-up document comprises:

identifying a parental level from meta-information in a mark-up document designated as a start-up document; and

selecting the mark-up document based on a result of comparing the parental level identified from the meta-information with the set parental level.

25. (Previously presented) The method of claim 24, wherein the selecting of the mark-up document comprises selecting a mark-up document displaying a warning message indicating that interactive content cannot be displayed when the parental level identified from the meta-information is higher than the set parental level.

26. (Previously presented) A method of displaying a mark-up document according to a parental level, comprising:

identifying a value of each of a plurality of elements of the mark-up document;

individually determining whether to display each of the elements depending on the value of each of the elements and display rule information; and

interpreting the mark-up document to display the mark-up document based on a result of the individually determining;

wherein the identifying, the individually determining, and the interpreting are performed in a reproducing apparatus.

27. (Previously presented) An apparatus to reproduce AV data from a data storage medium in an interactive mode using a mark-up document, comprising:

a reader to read the mark-up document and the AV data from the data storage medium;

an AV decoder to decode the AV data;

a presentation engine to identify a value of each of a plurality of elements of the mark-up document, individually determine whether to display each of the elements depending on the values of the elements and display rule information, and interpret the mark-up document based on a result of the individually determining; and

a blender to blend the mark-up document interpreted by the presentation engine and an AV screen obtained by reproducing the AV data.

28. (Previously presented) The apparatus of claim 27, wherein the display rule information is written according to Cascading Style Sheets (CSS) rules.

29. (Previously presented) The apparatus of claim 28, wherein the display rule information is written in a form of a Cascading Style Sheets (CSS) file.

30. (Previously presented) An apparatus to reproduce data from a data storage medium, comprising:

a reader to read desired data from the data storage medium; and

a controller to output a control signal to the reader to control the reader to read AV data and a mark-up document from the data storage medium, the mark-up document comprising interactive contents corresponding to a plurality of different parental levels;

wherein, in an interactive mode, the controller interprets the mark-up document according to a parental level set by the user.

31. (Previously presented) The apparatus of claim 30, further comprising:
an AV decoder to decode the AV data; and
a blender to blend a mark-up document screen obtained by interpreting the mark-up document and an AV screen obtained by decoding the AV data.

32. (Previously presented) The apparatus of claim 30, wherein:
the mark-up document defines a display window; and
the apparatus further comprises a blender to blend the AV data with the mark-up document so that the AV data is displayed in the display window defined by the mark-up document.

33. (Previously presented) The apparatus of claim 30, wherein the controller comprises plug-ins.

34. (Previously presented) The apparatus of claim 30, wherein the controller retrieves the mark-up document through a network.

35. (Previously presented) The apparatus of claim 30, wherein the parental level set by the user is one of five different parental levels G, PG, PG13, R, and NC-17 defined by a data storage medium-video standard for compatibility.

36. (Previously presented) The apparatus of claim 30, wherein:
the controller reproduces the AV data according to a data storage medium-video standard in the interactive mode; and
the different parental levels of the interactive contents of the mark-up document are defined by the data storage medium-video standard for compatibility.

37. (Previously presented) The apparatus of claim 30, wherein the controller uses an application program interface (API) to identify the parental level set by the user.

38. (Previously presented) The apparatus of claim 30, wherein the mark-up document is a start-up document comprising:

meta-information indicating a parental level; and

link information indicating a path of a mark-up document corresponding to the parental level indicated by the meta-information, and a path of a mark-up document not corresponding to the parental level indicated by the meta-information.

39. (Previously presented) The apparatus of claim 38, wherein the controller interprets the link information to retrieve the mark-up document corresponding to the parental level indicated by the meta-information when the parental level set by the user is not lower than the parental level indicated by the meta-information, and to retrieve the mark-up document not corresponding to the parental level indicated by the meta-information when the parental level set by the user is lower than the parental level indicated by the meta-information.

40. (Previously presented) The apparatus of claim 30, wherein:
the mark-up document is a start-up document comprising meta-information and link information; and

the controller identifies the parental level set by the user using an application program interface (API), and interprets the mark-up document using the meta-information and the link information according to the parental level set by the user.

41. (Previously presented) The apparatus of claim 30, wherein the data storage medium comprises a root directory comprising:

a video directory in which the AV data is stored; and

an interactive directory in which the mark-up document is stored.

42. (Previously presented) The apparatus of claim 30, wherein the mark-up document comprises mark-up document information indicating whether the parental level set by the user is

lower or not lower than each of the plurality of parental levels of the interactive contents of the mark-up document.

43. (Previously presented) The apparatus of claim 30, wherein the mark-up document comprises a Cascading Style Sheets (CSS) file.

44. (Previously presented) The apparatus of claim 30, wherein a Cascading Style Sheets (CSS) file provided for the mark-up document is stored on the data storage medium separately from the mark-up document.

45. (Previously presented) The apparatus of claim 30, wherein the mark-up document is written using a script language to represent the interactive contents corresponding to the plurality of different parental levels.

46. (New) The apparatus of claim 27, wherein:
the value of each of the elements corresponds to a parental level allotted to the element, the parental level being one of a plurality of different parental levels;
the display rule information indicates the values of elements that are not to be displayed for each of the plurality of different parental levels; and
the presentation engine individually determines whether to display each of the elements depending on the values of the elements, the display rule information, and a parental level set by a user, the set parental level being one of the plurality of different parental levels, and interprets the mark-up document based on a result of the individually determining.